

Good Afternoon.

My name is David Baumgarten. I am the County Attorney for the County of Gunnison, in the west of Colorado. Thank you for the opportunity to make this presentation. The topic identified for me is “Environmental Concerns Associated With Oil And Gas Construction Activities.” I cannot presume to be an expert on that. Nor can I presume to be an expert on the Colorado experience. But I can speak to my local government experience in Colorado and trust that it is useful.

## **I. INTRODUCTION**

The wonderful writer May Sarton gave advice that is as central to the task in front of us as it is to our relations with other people. She said: “We persuade, if we do at all, by being irresistible, not by demanding the impossible.” If it were the end of today, and we had been successful, we will have persuaded each other that reasonable federal regulation of stormwater discharge from small oil and gas construction is irresistible, and that avoidance of such regulation by the federal government is impossible.

It is most important for me to begin by clearly stating the intention of Gunnison County. That intention is identified in the first sentence of the first paragraph of the Gunnison County’s Temporary Oil and Gas Regulations.

“(t)he goal of the Board of County Commissioners of Gunnison County, Colorado is to provide a framework for the responsible exploration and production of oil and gas resources in Gunnison County in a manner that conserves other natural resources, that is sensitive to surrounding land uses, and that mitigates adverse impacts to and protects the public health, safety, welfare and environment of Gunnison County...”

Gunnison County recognizes that oil and gas are valuable natural resources that should be extracted and put to beneficial use. Gunnison County also recognizes that there are impacts, environmental and otherwise, caused by the extraction of those resources. It is the intent of Gunnison County that those who extract the resources reasonable and responsibly avoid and/or mitigate the impacts caused by the extraction.

Irresistible and appropriate regulation can be accomplished only by being attentive to core concerns of the industry, the environmental community, local government, the regulators tasked with responsibility to address public health, safety, welfare and the affected public.

Being quite direct, the industry needs assurance that regulation will provide three things: certainty, timing and money. That is: It must be that exploration and production can be scheduled and conducted knowing that if one follows the rules, one can obtain and comply with a permit, in a reasonable time, at a cost proportionate to impacts, and that the permit can be administered without undue burden.

The environmental community needs assurance that oil and gas exploration and production will not violate the first law of ecology – that the waters that sustain and nurture us reasonably be protected from degradation. The environmental community also needs assurance that such protection will be enforced, and will be implemented consistently.

Local government must be responsive to a broad scope of local constituents, on a daily basis, mindful of production on split estates and public lands, while ensuring a healthy sustainable local economy and environment. Local government is where theory meets reality, where public meets industry, where public meets government – often in a field, or around a kitchen table, or on the telephone at 6:30 in the morning with concerns about situations illustrated by Mr. Anderson's photos.

Federal and state regulators need to address the concerns of industry and the environmental community, local government and public, consistent with accepted science, and translated into regulations that are clear yet flexible enough to make sense over diverse geography and climates.

The substantive impacts to be regulated clearly have been identified.

The EPA itself determined 6 years ago that:

- Discharges from construction activity impact the biological, chemical, and physical integrity of receiving waters.
- Sediment yields from smaller construction sites are as high as or higher than the 20 to 150 tons/acre/year measured from larger sites.
- Siltation is the largest cause of impaired water quality in rivers and the third largest cause of impaired water quality in lakes.

Report To Congress On The Phase II Storm Water Regulations, EPA 833-R-99-001, October, 1999, p. I-4.

The EPA likewise has recognized that “Stormwater runoff from construction activities can have a significant impact on water quality. As stormwater flows over a construction site, it picks up pollutants like sediment, debris, and chemicals.”

Each phase of oil and gas development, whether on large or small sites, can have a significant chemical runoff consequence. This is not an indictment of the industry. It is the reality we must recognize as consumers, and regulators, of oil and gas.

- In the drilling and well completion phase, access roads and a drilling pad are constructed. In Western Colorado, these roads often are miles long in remote fragile environments, above 7000’ in elevation far from quick response and slow to rehabilitate. Drill cuttings and drilling muds may contain mercury, cadmium, arsenic and hydrocarbons. It is important to note that, even if construction is short term (less than 30 days), the storm water discharge opportunity and risk is much larger – often years due to topography, ground cover, climate, maintenance and operation.
- During production, produced water may contain contaminants including benzene, naphthalene, metals and radionuclides.
- If natural gas conditioning is performed at the site, the process may

involve use of triethylene glycol as a desiccant, sulfur, and iron sponge to remove hydrogen sulfide and carbon dioxide.

- Well maintenance activities required at regular intervals can involve acids, paints and cleaning solvents as well as corrosion inhibitors and stimulation compounds that are flushed through the well.
- Spills from leaking tanks, spills during transfer of condensate, and chemicals associated with production or maintenance activities or releases from flow lines are the most common form of accidental release.

U.S. E.P.A., “Stormwater Discharges From Construction Activity: Overview,  
“available at [http://efpub1.epa.gov/npdes/stormwater/const.cfm?program\\_id=6](http://efpub1.epa.gov/npdes/stormwater/const.cfm?program_id=6).

It may be useful to recap a Colorado regulatory experience:

1. The Colorado Phase II Stormwater Regulations were adopted by the Colorado Water Quality Control Commission at its December, 2000 Rulemaking Hearing and went into effect on March 2, 2001. In that Rulemaking, the Commission set a deadline of July 1, 2002 for permit applications for small construction sites.
2. At the request of oil and gas producers, the Colorado Water Quality Control Division agreed to use “enforcement discretion” to extend that July 1, 2002, deadline until March 10, 2003, for stormwater permits for one to five acre oil and gas construction sites. Correspondence dated December 26, 2002, from David Akers, Manager, Water Quality Protection Section, Water Quality Control Division, to J. Greg Schnake, Colorado Oil and Gas Association.
3. On April 14, 2003, the Commission acted to further postpone the deadline until March 10, 2005.
4. This spring, there was proposed for the Commission the third postponement for stormwater discharge permits for small oil and gas construction sites.

5. These postponements occurred in a state where oil and gas wells are widely distributed and have a significant volume. Two thirds of Colorado counties (42 of 64) have wells located in them. Thirty percent of Colorado counties (19 of 64) have at least two hundred wells. <http://www.oil-gas.state.co.us/General/AtAGlance.html> Approximately 9500 wells were drilled in the 5 years that implementation of Phase II was suspended for small oil and gas operations. The average pad size, without associated roads, is 1.2 acres. Using these figures, more than 10,000 acres of oil and gas well pads were unregulated for stormwater run off in Colorado between 2000 and 2005. Using the EPA estimates of 20 to 150 tons/acre/year of sediment, a number of million tons of sediment were unregulated to date.

6. In District Court, County of Gunnison, State of Colorado, Case No: 03-CV-76, Board of County Commissioners of the County of Gunnison, Colorado v. BDS, in which the State of Colorado intervened, the State to date has persuaded the trial court that Colorado counties have no authority to regulate impacts on water quality of oil and gas operations because it is only the State or Federal governments that can do so.

7. After the public hearing process regarding the proposed third postponement of Phase II, the Colorado Water Quality Control Commission found:

“ ... if not properly managed, discharges from construction activity can impact the biological, chemical and physical integrity of receiving waters. This evidence includes EPA’s analysis of water quality impacts from small construction sites in general (FR Vol. 64, No. 235, 68724-68731) and evidence of potential water quality impacts from specific oil and gas construction sites in Colorado. The Commission regards sediment deposition as a significant problem affecting water quality in the state.”

The Commission also found that: “At the 2004 rate of permit issuance by the Colorado Oil and Gas Conservation Commission, a further fifteen-month delay in stormwater permit requirements could result in substantial additional acreage disturbed by oil and gas construction activities that would not be covered by permits for stormwater discharges. That delay could have a significant impact on

water quality that implementation of the stormwater permit program, along with appropriate planning and BMPs, could mitigate.”

The Commission explicitly found “... that there are no significant differences in oil and gas construction sites versus other types of construction sites that would affect the potential sediment yield from such disturbed areas. Although the oil and gas industry has asked EPA to consider the short time frame for actual construction at most oil and gas sites, this does not take into account the time it can take (up to several years) for revegetation of disturbed areas in Colorado. In addition, no evidence was presented that the potential impacts on public health, beneficial use of water or the environment from oil and gas construction activities are significantly different from other small construction sites so as to warrant special consideration.”

The Commission further found:

“No evidence was submitted quantifying unreasonable transaction costs of stormwater permitting in Colorado for this industry.”

“Evidence reflected a low stormwater permitting cost for industry compared to the other costs of oil and gas development and compared to the water quality benefits of prompt implementation of the permitting program.”

The Commission concluded that the record for its rulemaking provided “sound scientific or technical evidence that establishing a deadline for stormwater discharge permit applications for oil and gas construction activities disturbing between one and five acres earlier than that established by EPA is necessary to protect the public health, beneficial use of water or the environment of the state.”

The Colorado experience suggests that, in the vacuum of federal regulation, local and state governments will enact their own regulations. While these regulations may satisfy some of the core interests I identified before, it may also confront the industry and other communities – even in the same gas and oil field – with a dozen different flavors of regulation. One solution is for the federal government simply to implement Phase II for small oil and gas sites.

Another potential solution has been articulated by the Independent Petroleum Association of America. The “Reasonable And Prudent Practices For Stabilizations” (the “RAPPs”) for oil and natural gas exploration and production sites:

- Are not prescriptive: that is, not an attempt to identify 1 and only 1 solution but accepting of industry and environmentally informed and driven alternative solutions
- Are: proactive
- Are: keyed to the various topographic and climatic area types of the country.
- And, within each topographic and climatic area type, decision tree analyzes are presented based on vegetative cover and distance to regulated water bodies.

We have an opportunity to solve a significant problem – perhaps by consensus – that is being furthered by this hearing. I trust that we will be successful.

Thank you.